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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/101,236	07/06/1998	YOSHIHIDE MATOBA	PM255089/SCC	9423

7590 12/27/2002

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EXAMINER

MARSCHEL, ARDIN H

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 12/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.  
09/101,236

Applicant(s)

Matoba et al.

Examiner

Ardin Marschel

Art Unit

1631



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on 5/30/02 and 8/29/02

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 2-18 and 20-42 is/are pending in the application.

4a) Of the above, claim(s) 3-18 and 21-36 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 2, 20, and 37-42 is/are rejected.

7)  Claim(s) 1 and 19 have been canceled. is/are rejected.

8)  Claims 2-18 and 20-42 are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

6)  Other: \_\_\_\_\_

Applicants' arguments, filed 5/30/02 and 8/29/02, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The replacement abstract, filed 8/29/02, is acceptable and has been entered.

Applicants' request for reconsidering the restriction requirement is noted, but that nothing is said request negates the previously summarized reasons for the requirement, which is therefore maintained and is hereby made FINAL. Claims 2, 20, and 37-42 are directed to embodiments of the elected specie.

NEW MATTER:

Claims 2, 20, and 37-42 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants point to the specification at pages 51, 57, and 152-153 for support for the instant claim amendments, especially represented in the fugacity determination as listed in claim 37,

lines 4-6. Consideration of both of said pages 51 and 57 reveal that spraying of chemical is practiced and then evaluated via said fugacity calculations. The fugacity determinations in these disclosures are connected to spraying embodiments and not generic to any invention. It is additionally noted that spraying practice in the instant claims are distinct species as outlined in the office action, mailed 8/31/01, and elected by applicants in the response, filed 9/28/01. The extension of these fugacity determination parameters to broaden fugacity determination beyond spraying determinations is therefore NEW MATTER. Consideration of the pages 152-153 reveals that vaporization practice is therein disclosed with associated fugacity determinations. Similar to the above pages 51 and 57 disclosures the extension of these fugacity determinations beyond vaporization practice is NEW MATTER. It is additionally noted that said pages 51, 57, and 152-153 lack written basis for a fugacity determination which only evaluates one item alone, but rather determines fugacity via an equation which incorporates multiple parameters. See, for example, page 51, equation (16) which requires all of 4 terms in a fugacity calculation. This is very different from instant claim 37, for example, where fugacity may be optionally calculated utilizing only one parameter selected from a list as in the claim. This single selection option for fugacity calculation is also NEW MATTER. This rejection is necessitated

by amendment.

Claims 2, 20, and 37-42 are rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for fugacity differential equation simulation which evaluate the fugacity via the four parameters of V-change, deposition, transference, and degradation, does not reasonably provide enablement for a generic unlimited differential equation as cited in the claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make/use the invention commensurate in scope with these claims.

Factors to be considered in determining whether a disclosure would require undue experimentation have been summarized in Ex parte Forman, 230 USPQ 546 (BPAI 1986) and reiterated by the Court of Appeals in In re Wands, 8 USPQ2d 1400 at 1404 (CAFC 1988). The factors to be considered in determining whether undue experimentation is required include: (1) the quantity of experimentation necessary, (2) the amount or direction presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. The Board also stated that although the level of skill in molecular biology is high, the results of experiments in genetic

engineering are unpredictable. While all of these factors are considered, a sufficient amount for a *prima facie* case are discussed below.

This rejection is maintained and reiterated from the previous office action, mailed 12/31/01, and as necessitated by amendment regarding newly added claims and limitations. Note that the above NEW MATTER rejection supports a lack of enablement also beyond the above noted embodiments in this rejection. No other argument(s) have been set forth regarding this rejection.

Claims 2, 20, and 37-42 are rejected, as discussed below, under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague and indefinite as to the relationship between fugacity and the indoor behavior of the compound in the claim practice. It is noted, for example, in claim 37, lines 4-6, that fugacity is calculated and then indoor behavior is determined from said fugacity in lines 7-9. Nothing, however, defines what determination or relationship is meant for converting fugacity to indoor behavior. Clarification via clearer claim wording is requested. This rejection is necessitated by amendment due to newly added claims are is reiterated and maintained from the previous office action, mailed 12/31/01, as not being argued further and still remaining as an

issue in the instant claims.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 2, 20, and 37-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nose [J. Pestic. Sci. 9(1):7-12 (1994); abstract only] and in view of the legal decision of *In re Venner* [262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)] regarding computerization via software as in instant claims 20

and 42.

This rejection is reiterated and maintained from the previous office action, mailed 12/31/01, and as necessitated by amendment regarding newly added claims. It is also noted that this rejection is maintained in anticipation of removal of the above noted NEW MATTER thus leaving the claims rejected as noted in said 12/31/01 office action. Applicants argue that Nose would not have suggested fugacity determination by differential equation. In response the abstract of Nose clearly determines movement of oxamyl via differential equation. Fugacity is reasonably interpreted as such movement, similar to its related word, fugitive, which is representative of movement as a result of effects on the material being moved including those as described clearly in the abstract of Nose. Applicants have argued that fugacity is defined in different units, such as Pascal units (Pa) but have not supported any such limitation for fugacity evaluation, either instantly in the specification or elsewhere. Thus, fugacity remains a generic term which is reasonably evaluated via movement, such as vertical movement, as in Nose.

The entire Nose reference publication is supplied herewith along with an English translation, however, the abstract of Nose is still deemed to support the above rejection.

No claim is allowed.

Applicants' amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

This application contains claims 3-18 and 21-36, drawn to an invention non-elected without traverse in Paper No. 10, filed 9/28/01. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (37 C.F.R. § 1.144) M.P.E.P. § 821.01.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D.,

can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

December 26, 2002

*Ardin H. Marschel*  
ARDIN H. MARSHEL  
PRIMARY EXAMINER